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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,356

Applicant(s)

SHAH ET AL.

Examiner

Christopher P. Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 22-26 and 42-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 27-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040220, 20051019.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-21 and 27-41, drawn to a shaped article, classified in class 428, subclass 35.7.

II. Claims 22-26 and 42-45, drawn to a method of making a shaped article, classified in class 264, subclass 500.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as forming the multilayered structure into an article by thermoforming or compression molding.

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2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Richard Roberts on October 3, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-21 and 27-41. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-26 and 42-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Double Patenting

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-12, 14-15, 17, 19-20, 27-31, 33-34, 36, 38-39, and 41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-49 of copending Application No. 10/783,357. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '357 teach an article for packaging moisture sensitive products (claim 28), which is a shaped article, comprising a

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fluoropolymer layer, an adhesive tie layer comprising at least one tackifier and at least one ethylene/alpha-olefin copolymer, and an outer thermoplastic polymer layer (claim 1). The article further comprises more polymer layers attached via the same adhesive to either the outside of the thermoplastic polymer layer or the inside of the fluoropolymer layer (claims 2-7).

The polymer fluoropolymer layer comprises poly(chlorotrifluoroethylene) (claims 8-10). The outer thermoplastic polymer layer is a polyolefin such as polyethylene or polypropylene (claim 11). The tackifier is a terpene-based polymer or petroleum-based polymer (claims 13-14). The ethylene/alpha-olefin copolymer comprises a copolymer comprising ethylene and at least one alpha-olefin having 3 to 20 carbon atoms (claim 15). The article is formed by co-extrusion blow molding (claim 45). The article comprises a moisture sensitive product enclosed in the shaped article adjacent to the inner fluoropolymer layer (claim 27).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-15, 17-20, 27-34, 36-39, and 41 are provisionally rejected on the ground of nonstatutory obviousness-type double

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patenting as being unpatentable over claims 1-61 of copending Application No. 10/783,355. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '357 teach an article for packaging moisture sensitive products (claim 53), which is a shaped article, comprising a fluoropolymer layer, an adhesive tie layer comprising at least one tackifier, at least one ethylene/alpha-olefin copolymer, and at least one styrenic block copolymer, and an outer thermoplastic polymer layer (claim 1). The article further comprises more polymer layers attached via the same adhesive to either the outside of the thermoplastic polymer layer or the inside of the fluoropolymer layer (claims 2-7). The polymer fluoropolymer layer comprises poly(chlorotrifluoroethylene) (claims 8-10). The outer thermoplastic polymer layer is a polyolefin such as polyethylene or polypropylene (claim 11). The tackifier is a terpene-based polymer or petroleum-based polymer (claims 13-14). The ethylene/alpha-olefin copolymer comprises a copolymer comprising ethylene and at least one alpha-olefin having 3 to 20 carbon atoms (claim 15). The article is formed by co-extrusion blow molding (claim 57). The article comprises a moisture sensitive product enclosed in the shaped article adjacent to the inner fluoropolymer layer (claim 53).

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4, 34, 39, and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the limitation "further comprising a plurality of polymer layers" renders the claim vague and indefinite since it is dependent on claim 2, which requires the article to further comprise at least one polymer layer. It is not understood if the limitations of claim 4 is merely stating that the at least one polymer layer is claim 2 is actually a plurality of polymer layers or if the plurality of polymers layers in claim 4 is in addition to the at least one polymer layer in claim 2.

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Regarding claims 34 and 39, the limitation "wherein said product is adjacent to said central fluoropolymer layer" renders the claims vague and indefinite because it is not understood how the product can be adjacent to a layer that is surrounded by other layers.

Regarding claim 41, the limitation "said inner fluoropolymer layer" lacks antecedent basis because claim 36 only teaches a central fluoropolymer layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 1-21 and 27-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (USPN 5,139,878) in view of Jing (US 2001/0049408 A1).

Regarding claim 1, Kim et al teach a shaped article for storing a product (col.9, 1.1-9) being formed from a multilayered structure (see abstract). The structure comprises in sequence an inner fluoropolymer layer an adhesive tie layer and outer thermoplastic polymer layer (col.6, 1.44-47). The adhesive tie layer comprises at least one ethylene/alpha-olefin copolymer (col.4, 1.64 - col.5, 1.12) and at least one styrenic block copolymer (col.5, 1.53-59). Regarding claims 2-5, the shaped article obviously further comprises additional polymer layers made from the same type materials as the thermoplastic polymer layer attached to the thermoplastic polymer layer by the adhesive containing at least one ethylene/alpha-olefin copolymer and at least one styrenic block copolymer (col.6, 1.42-54). Regarding claims 6 and 7, the inner fluoropolymer layer comprises a material selected from the group consisting of chlorotrifluoroethylene homopolymers, ethylene-chlorotrifluoroethylene copolymer, ethylene-tetrafluoroethylene

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copolymer, fluorinated ethylene-propylene copolymer, perfluoroalkoxyethylene, polytetrafluoroethylene, polyvinyl fluoride, polyvinylidene fluoride, and copolymers and blends thereof (col.2, 1.52-59) and especially poly(chlorotrifluoroethylene) (col.2, 1.62-66). Regarding claims 8-9, the outer thermoplastic polymer layer comprises a material selected from the groups claimed in claims 8 and 9 (col.3, 1.7-40). Regarding claim 12, the ethylene/alpha-olefin copolymer of the adhesive tie layer comprises a copolymer comprising an ethylene and at least one alpha-olefin having from 2 to 8 carbon atoms (col.5, 1.1-12). Regarding claim 13, the adhesive tie layer further comprises at least one styrenic block copolymer (col.5, 1.53-59). Regarding claim 14, the limitation "formed by co-extrusion blow molding" is a process limitation and is given little patentable weight because article are defined by structure. Although method limitations are considered they are only given weight insofar as any structure they provide the article claimed. In this case, the method of making the article would not change the structure of the article since the same container can be made by multiple different methods and Kim et al teach that a container is made from the structure. Regarding claim 15, Kim et al teach packaging or enclosing medicaments, pharmaceuticals, and/or foodstuffs in the

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shaped article (col.9, 1.1-5), all of which are moisture sensitive products and since the product is placed within the article the product is adjacent to said inner fluoropolymer layer. Regarding claim 16, Kim et al teach forming the shaped article into a container for foodstuffs, pharmaceutical compositions and other articles such as paints, liquid slurries and gelatinous compositions which obviously includes a bottle (col.9, 1.5-9). Claim 17 is a combination of the limitations in claims 1, 2, 7, and 9, all of which are taught in Kim et al as shown above. Claims 18-21 teach the same limitations as claims 13-16 respectively, which are taught in Kim et al as shown above.

Regarding claim 27, Kim et al teach a shaped article for storing a product (col.9, 1.1-9) being formed from a multilayered structure (see abstract). The structure comprises in sequence a first outer thermoplastic polymer layer, a first adhesive layer, a central fluoropolymer layer, a second adhesive tie layer, and a second outer thermoplastic polymer layer (col.6, 1.47-51). Regarding claims 28 and 29, the inner fluoropolymer layer comprises a material selected from the group consisting of chlorotrifluoroethylene homopolymers, ethylene-chlorotrifluoroethylene copolymer, ethylene-tetrafluoroethylene copolymer, fluorinated ethylene-propylene copolymer,

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perfluoroalkoxyethylene, polytetrafluoroethylene, polyvinyl fluoride, polyvinylidene fluoride, and copolymers and blends thereof (col.2, 1.52-59) and especially poly(chlorotrifluoroethylene) (col.2, 1.62-66). Regarding claims 20 and 31, the first and second outer thermoplastic polymer layers comprise material selected from the groups claimed in claims 30 and 31 (col.3, 1.7-40). Regarding claim 32, the adhesive tie layer further comprises at least one styrenic block copolymer (col.5, 1.53-59). Regarding claim 33, the limitation "formed by co-extrusion blow molding" is a process limitation and is given little patentable weight because article are defined by structure. Although method limitations are considered they are only given weight insofar as any structure they provide the article claimed. In this case, the method of making the article would not change the structure of the article since the same container can be made by multiple different methods and Kim et al teach that a container is made from the structure. Regarding claim 34, Kim et al teach packaging or enclosing medicaments, pharmaceuticals, and/or foodstuffs in the shaped article (col.9, 1.1-5), all of which are moisture sensitive products and since the product is placed within the article the product is adjacent to said central fluoropolymer layer. Regarding claim 35, Kim et al teach

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forming the shaped article into a container for foodstuffs, pharmaceutical compositions and other articles such as paints, liquid slurries and gelatinous compositions which obviously includes a bottle (col.9, 1.5-9). Claim 36 is a combination of the limitations in claims 27, 29, and 31, all of which are taught in Kim et al as shown above. Claims 37-41 teach the same limitations as claims 32-35 respectively, which are taught in Kim et al as shown above.

Kim et al fail to teach that the adhesive tie layer further teaches at least one tackifier. However, Jing teaches that tackifiers are added to adhesive layer layers of hydrocarbons being bonded to fluoropolymer layers in order to improve inter-layer adhesion (p.4, paragraph 42). Jing also teaches that tackifiers used for this purpose include any of the tackifier compounds known to improve adhesion performance characteristics including terpene-based polymers, rosin-based polymers, petroleum-based polymers, and styrene-based polymers (p.4, paragraph 43), which are the tackifiers claimed in claims 10-11. One of ordinary skill in the art would have recognized that Kim et al and Jing are analogous insofar as both references are concerned with forming polyolefin based adhesive layers bonded for bonding to a fluoropolymer layer.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add at least one tackifier, selected from the group taught by Jing, to the adhesive of Kim et al, in order to improve the interlayer adhesion between the adhesive layer and fluoropolymer layer, as taught by Jing.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ikeda et al (EP 857758 A1); Ochiuni (USPN 4,588,642); Chao et al (USPN 4,252,858).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes

Examiner

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CPB *CPB*

December 9, 2005



ALICIA CHEVALIER
PRIMARY EXAMINER